

a field voltage detecting circuit for detecting field voltage induced in said field coil when said field coil is not supplied with field current; and

a switch control circuit, connected to said field voltage detecting circuit, for controlling said switching circuit according to said field voltage.

5. (Amended) A voltage regulator of a vehicle AC generator including a rotor having a field coil and a plurality of magnetic poles and a stator having a stator core and an armature coil, said voltage regulator comprising:

a field current switching circuit connected to said field coil;

a field voltage detecting circuit for detecting field voltage induced in said field coil when said field coil is not supplied with field current;

a control circuit, connected to said field voltage detecting circuit, for controlling said field current switching circuit according to an output voltage of said armature coil;

a power circuit for supplying electric power to said control circuit;

a power drive circuit for controlling supply of said electric power to said control circuit; and

first means for detecting rotation speed of said rotor according to said field voltage, wherein said power drive circuit supplies electric power from said power circuit to said control circuit if said rotation speed becomes as high as a predetermined speed.

15. (Amended) A voltage regulator of a vehicle AC generator including a rotor having a field coil and a plurality of magnetic poles and a stator having a stator core and an armature coil, said voltage regulator comprising:

a switching circuit for supplying field current to said field coil in a controlled manner;

means for detecting rotation speed of said rotor according to voltage induced in said field coil when said field coil is not supplied with field current; and

a switch control circuit, connected to said means, for providing said switching circuit with electric power to be supplied to said field coil when said detected rotation speed becomes as high as a predetermined speed.

16. (Amended) The voltage regulator as claimed in claim 15, wherein said means comprises first circuit means for providing field voltage induced in said field coil by residual magnetic flux of said stator core.

REMARKS

Claims 1-19 are pending. By this Amendment, the title and claims 1, 5, 15 and 16 are amended. The attached Appendix includes a marked-up copy of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Applicants request all further communications from the Patent Office be forwarded to Oliff & Berridge, PLC, in accordance with the Notice Regarding Power of Attorney mailed on March 22, 2002.

Applicants appreciate the courtesies extended Applicants' representative at the interview held November 11, 2002 by Examiners Cuevas and Tamai. The points discussed by Applicants' representative are incorporated in the remarks below.

Claims 1-4 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,663,631 to Kajiura et al. (Kajiura). The rejection is respectfully traversed.

Applicants assert that Kajiura does not disclose a voltage regulator of a vehicle AC generator including a rotor having a field coil and a plurality of magnetic poles, and a stator having a stator core and an armature coil, the voltage regulator comprising a switching circuit, connected to the field coil, for supplying field current to the field coil in a controlled manner, a field voltage detecting circuit for detecting field voltage induced in the field coil when the field coil is not supplied with field current, and a switch control circuit, connected to the field voltage detecting circuit, for controlling the switching circuit according to the field voltage, as recited in claims 1-4.